

# LOTIONS & POTIONS

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Making your own homemade lotions and other body products such as soaps, scrubs, balms, and bath salts, has become quite popular. Most are easy to make, use ingredients relatively easy to find, and cost less than the commercial version. One more benefit is quality control.

Besides these reasons they are just plain fun to make!! They make great gifts and are a perfect add-on to 4-H work. There are a couple of places in the State 4-H Fair Book that these items can be used as an exhibit in the local county and state fairs.

## INGREDIENTS/SUPPLIES

### SUPPLIES

- Microwave or double boiler (even an electric skillet can be used)
- Large glass measures or bowls with pour spouts (no metal)
- wand mixers
- scale (to 1 gram or less)
- Clean sterilized containers
- Kitchen tools - wooden spoons, spatulas, etc.



### LOTION INGREDIENTS (use *Formulas* to adjust to your preferences)

➡ **Emulsifying Wax (3 to 7%)**: A vegetable based emulsifying wax is preferred. Natural binders like lecithin are not listed because they seem to be hard to work with.

➡ **Stearic Acid (3 to 5%)**: May use less depending on the consistency you want to achieve. Using vegetable based ingredients such as soy or palm based stearic acid is preferred. This is what makes a cream stiff, it feels heavier on the skin than a lotion.

➡ **Oils (10 to 30%)**: This is a large percentage spread! You'll need to experiment with several different amounts before you find an amount you like for a given recipe, this will change depending on the oils/butters used.

➡ **Vegetable Glycerin (3 to 10%)**: Again, the percentage is something you'll need to decide for yourself. Some feel that higher amounts are just too sticky. Glycerin is a humectant, which means that it grabs moisture out of the air, it can also grab the moisture out of your skin, so don't over do it.

➡ **Citric Acid (.25 to 1%)**: If you find that using the higher rate is irritating your skin, then try lessening the amount. Citric Acid is used in lotions to raise the acidity which helps make a less friendly growing ground for bacteria. It is not needed, but you may find it helps your lotion last longer.

➡ **Tea Tree Essential Oil (apx. 1%)**: Lotions last longer when you use this, but it shouldn't be relied upon as a complete preservative (especially if selling your wares).

➡ **Germaben II**: Please contact your supplier for correct usage instructions on using this very powerful preservative.

➡ **Distilled Water (60 to 80%)**: Lotions and bacteria go hand in hand. Sterilizing all of your equipment including containers and using only distilled water or boiling your tap water is highly recommended.

➡ **Essential Oils (apx. 20-30 drops per 8 ounces of base)**: Add these and blend just before filling containers.





# LOTIONS

## FORMULATING PERCENTAGES

1. **Step by Step Instructions:** Grab yourself a calculator, you're going to need one! This applies to all products, not just making lotion, so if you need to figure out how much lip balm base you need to make to fill your cute little pots, use this method.



2. **Formulating a Lotion Recipe:**

To make an eight ounce batch total to fill 2 four ounce containers. You need to use the following recommendations of ingredient percentages:

Water: 70%  
Oil: 25%  
Emulsifying Wax: 5%

3. **Turn Percent Signs into Decimal Points:**  
*Divide percentages by 100.*

70% water ( $70 \div 100$ ) becomes **.70**  
25% oil ( $25 \div 100$ ) becomes **.25**  
5% emulsifying wax ( $5 \div 100$ ) becomes **.05**

4. **Create 8 Ounces of Lotion:** *Need to multiply decimals by eight to get ounces needed.*

.70 (water - step 4) x 8 oz. = 5.6 oz. water

.25 (oil - step 4) x 8 oz. = 2 oz. oil

.05 (wax - step 4) x 8 oz. = .4 oz. emulsifying wax

5. **Formula to Make Lotion:**

5.6 ounces of water  
2 ounces of oil  
.4 ounces of emulsifying wax

**100% of our formula =**  
**5.6 + 2 + .4 = 8 ounces!**

## SAMPLE LOTION

*Here's a recipe that we'll use for an example.*

1. **Total Ingredients to Get 100% of Recipe in Ounces:**

10 oz. distilled water	1 oz. coconut oil
2oz. vegetable glycerin	1 oz. grapeseed oil
1 oz. emulsifying wax	1 oz. jojoba
1 oz. mango butter	.5 oz. lanolin <i>or</i> apx. 1 T.
1 oz. shea butter	1/2 oz. palm stearic

**19 ounces = 100 % of recipe**

2. **How to Find out Each Ingredient's Percentage:**

*The formula we are going to use looks like this...*  
**Amount of ingredient  $\div$  Total (19 ounces) x 100**

*This recipe calls for 10 ounces of water, so ...like-  
10 divided by 19 = .5263 times 100 = 52.6 or 53 %!*

***\*This recipe is using 53% WATER!***

3. **Calculating the Top-Secret Formula:**  
*The oils can be added together and then formulated into a percentage the same way.*

53% distilled water	5% coconut oil
11% vegetable glycerin	5% grapeseed oil
5% emulsifying wax	5% jojoba
5% mango butter	3% lanolin
5% shea butter	3% palm stearic

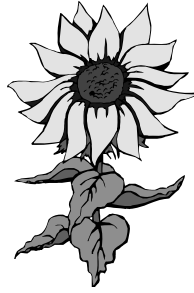
**19 ounces TOTAL = 100%**

***\*Now we have a recipe that equals***



## Sun Flower Power Lotion

1.3 grams Citric Acid  
9 grams Stearic Acid  
20 grams Emulsifying Wax  
10 grams Liquid Glycerin  
65 grams high-oleic Sunflower Oil  
10 grams Coconut Oil  
380 grams distilled water  
3.75 grams Germaben II  
(preservative), optional  
2.5 grams desired fragrance oil



Weigh all ingredients into a microwave safe container except Germaben II and fragrance oil. Heat in short bursts 1 minute at a time until all ingredients have been completely melted (usually takes only 2 minutes on High). You'll know the waxes are melted when they resemble milky looking little blobs. If you fail to melt your ingredients entirely, your lotion will have a grainy texture. Stir with a wooden stick, spoon, or rubber spatula.

Next, mix using your immersion blender or small hand beaters. This process will go relatively fast with this type of blending tool (1 minute is usually sufficient). Be careful not to incorporate too much air into your mixture, this is what creates that frothy looking stuff we occasionally see after the lotion has set up. Now, add your fragrance oils or essential oils. Mix again for just a few seconds. Your lotion is now ready to pour (will look very much like warm milk). Pour into your bottles, cap and shake gently as the mixture cools.

## Hunsaker's Very Simple Lotion

¼ tsp Citric Acid  
1 tsp Glycerin  
5 tsp Stearic Acid  
7 ½ teaspoon Emulsifying Wax  
1/3 cup oil (sunflower, safflower, grape seed, or almond are good oils for this, but you can also use plain old vegetable oil, ie. soy, canola, or even olive)  
1 teaspoon melted Cocoa Butter  
1 2/3 cup distilled water  
Fragrance or essential oils, 1/4 to 1/2 teaspoon (apx. 30 drops)  
10 drops preservative (Germaben II or Germal)

*\*Follow directions for Sunflower Power Lotion.*

## Jensen's Favorite Lotion

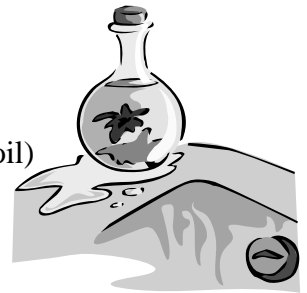
11.2 oz. Distilled Water  
1.9 oz Almond Oil or other mild oil  
.96 oz Shea Butter  
.48 oz Glycerin  
.8 oz Emulsifying Wax  
.16 oz Citric Acid  
.48 oz Stearic Acid  
.2 oz fragrance and color  
.175 oz Germaben

Measure carefully and place all ingredients in microwave safe bowl or heat resistant glass measuring cup. Melt ingredients together until wax looks like melted whipped topping (Cool Whip®). Remove from microwave and using a stick blender, whip thoroughly. Add fragrance, color, and Germaben; mix well. Pour into bottles, shake often until set.

## Peppermint Foot Cream

*Thick and Very Creamy!*

20 grams Shea Butter  
21 grams Hemp Seed Oil  
(can use plain old vegetable oil)  
9 grams Cocoa Butter  
10 grams Stearic Acid  
7 grams Glycerin  
14 grams Emulsifying Wax  
0.6 grams Citric Acid  
150 grams Distilled Water  
2.5 grams Germaben II  
1.3 grams Peppermint Essential Oil



***\*Follow basic lotion making directions under Sunflower Power Lotion recipe.*** This is great for rough, dry feet. Use all summer long to keep heels soft and smooth for sandal season—it works like a charm. PLUS, it feels wonderful on your feet after being on them all day long. Wash feet in cool water, then apply this cream and massage in.



# BATH SALTS

## INGREDIENTS

1. Epsom salt, sea salt or rock salt
2. Essential oils or fragrance oils
3. Dried herbs and flowers
4. Powdered milk, or cocoa butter—for added moisturizing properties
5. Baking soda—waters softening properties
6. Citric acid—fizz and bringing pH into balance



## STORAGE

Bath salts are best stored in containers with a large mouth as they may clump and be hard to get out of a narrow necked bottle. Glass jars, bowls, paper bags, etc. make good containers to store or give bath salts.

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## BASIC Bath Salt Recipe

- 3 cups Epsom salts
- 1 cup baking soda
- 2 teaspoons Glycerin
- 6-8 drops fragrance or Essential Oil
- Food coloring as desired

Combine Epsom salts, baking soda and glycerin; mix until well blended. Add scents, blending until there are no clumps, just a fine powder. (Zip-style freezer bags work well for blending bath salts.) Add food coloring as desired. Allow to air dry before packaging.

## DESERT SANDS

*Make Basic Bath Salt Recipe* using 4 drops musk oil and 3 drops jasmine fragrance oil. Divide mixture into three bowls or freezer bags. To one add, 3 drops of yellow food coloring. To the second, add 3 drops of red food coloring. To the third, add 1 drop of red and 2 drops yellow. Layer: Red, Orange, Yellow. Try pure vanilla flavoring instead of oil for a lighter fragrance.

## OCEAN BLUE BATH SALTS

*Make Basic Bath Salt Recipe* - Add 3 drops jasmine oil and 4 drops vanilla oil. Color with 4 drops of blue food coloring. This is pretty in a glass bowl with a sea shell for a scoop.

## ACHES & ITCHES Bath Salt Recipe

- ½ cup baking soda
- ½ cup dry milk
- 1 cup Epsom salt
- 1 cup sea salt
- Essential or fragrance oils

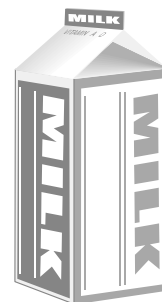
Mix all ingredients together in a large ziploc bag.

## COUNTRY MILK

- 1 cup dry powdered milk
- 1 cup Epsom salts or sea salt
- 1/2 cup baking soda
- 1/4 cup citric acid
- 20 drops scented oil

In a large bowl, combine all ingredients above and then transfer to a decorative jar. Feel free to play with the amounts of scented oil until the scent is yours alone, you may prefer more, or a blend of different ones.

*\*Add about a half cup to a cup to your bath and then enjoy!*





## BODY SCRUBS

### BROWN SUGAR BODY SCRUB

¼ cup brown sugar (can use granulated for a grainier scrub)  
½ cup fine sea salt  
⅓ cup or less of a combination of sunflower, sweet almond and jojoba oils

1 tablespoon honey

1 teaspoon vitamin E oil (optional-serves as a preservative)

½ teaspoon fragrance or essential

Mix all ingredients in small bowl. Spoon into jar. This recipe makes 8 ounces. The oil will settle on the top, just stir before use. This is an invigorating scrub so rub gently. Works very well on legs, feet, knees, elbows, even arms and back. Not recommended for faces. Any essential or fragrance oils may be substituted.

**Variation:** A little ground fresh ginger root is great in this mixture—very invigorating!!

**\*Note:** *If using these essential oils avoid exposing skin to direct sun. Can also add commercial preservatives intended for scrubs.*

### SCENTED SALT SCRUB

3 cups fine sea salts

½ cup olive oil

½ cup sweet almond oil

½ teaspoon tea tree essential oil

½ teaspoon Siberian fir essential oil

½ tablespoon peppermint essential oil

1 tablespoon rosemary essential oil

**\*\*\*** *mix your salt and emollient oils first, then add the essential oils. Store in a tightly sealed glass container*

To use, scoop out a tablespoon or two; begin to massage it onto skin while in the shower or bath. Work in a circular motion, starting with extremities and going toward the heart. Leave the scrub on your skin for 5 to 20 minutes, and then rinse off with cool water.



### PEPPERMINT LAVENDER FOOT GLOW SCRUB

1 ½ cups sea salt

¼ cup sweet almond oil

2 drops peppermint essential oil

3 drops lavender essential oil

Combine the sea salt and almond oil and stir well to mix. If the mixture seems dry and does not hold well together in your hands, add almond oil by the tablespoon until you can scoop it comfortably. Add the essential oils last and stir well.

\*Rub the scrub vigorously all over feet and ankles (especially heels and soles). Rinse well with warm water and follow with a rich lotion or cream. Sleep in socks so the moisturizer is absorbed well into your skin.

\*Do not use this mixture on broken skin and remember, it's best when used immediately but you can store it in an air tight container and it will keep well so long as it is not exposed to moisture.

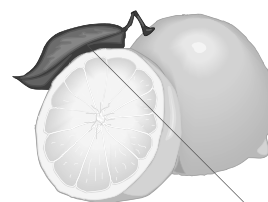
### LEMON SUGAR BODY SCRUB

*This recipe is both cleansing and detoxifying.*

½ cup granulated sugar

10 drops lemon oil, or half a lemon, freshly squeezed

1 cup olive, jojoba, or almond oil



Mix all ingredients together.

Apply to body by massaging in a circular motion, then shower off. **Yield:** 1 full body treatment.

**NOTE:** Scrubs can get added moisture into the jar or bottle when using. This can produce a fermentation and growth of yeasts and other microorganisms. Be sure to have a clean scoop, spoon, or small ladle handy, and reseal after use. This is more pronounced when storing and using jars right in the shower and when exfoliants such as corn meal or oatmeal are used. Be sure to keep wet and dripping hands, etc. out of jar. Discard scrub if such a fermentation takes place.



# LIP BALMS

## Tips and Tricks

- Making your own balm is easy, taking only seconds by melting a few natural ingredients in the microwave.
- When the base is done melting, you simply mix in a few flavors, essential oils and/or scents and then pour into small containers to cool. The balm cools very quickly.
- Making your own balm also lends itself to making your own solid perfume and healing balms, such as Tiger Balm.
- Once you understand the simple chemistry of balm making, you are then learning the bases for lotions and soaps.
- Sterilize containers by simply washing them in the dishwasher or clean by hand and rinse with water tainted with a small amount of bleach.
- Essential oils can break apart when added to a very hot mixture; allow the wax mixture to slightly cool before adding.

- Use glass or porcelain bowls and wood utensils. If metal must be used, avoid aluminum and non-stick surfaces.
- To add vitamin E, poke a hole in the capsule with a pin and squeeze out the contents. Discard the capsule. Avoid using nut oils if allergic reactions are a concern.
- Be certain to label ingredients if presenting homemade lip balm as gifts.
- Beeswax pellets are the best wax pellets to use for a balm consistency. Regular candle wax pellet will create a harder balm.
- Experiment as you feel confident.
- Essential Oils or flavored oils - **NOT** fragrance oils
- Honey or powdered sugar, (optional)
- Dyes or a little lip stick for color



## BASIC HOMEMADE LIP BALM

3 teaspoons grated unbleached beeswax  
5 teaspoons carrier oil (sunflower, castor, or jojoba)  
6 or 7 drops essential oil  
1 teaspoon honey (for flavor)

Melt the beeswax and carrier oil together in the top of a double boiler, stirring to combine. Remove from heat; add honey and essential oil. Mix thoroughly so the honey does not clump. To add a little color, stir in a tiny dab of lipstick with a coffee stirrer. Pour the mixture into containers; let sit 20 minutes before covering or moving. Yield ½ ounce.

**Variation:** For glossier lip balm, use 2 teaspoons wax and 8 teaspoons carrier oil.

## FLAVORED LIP BALM

2 tablespoons Beeswax  
2 ½ tablespoons Shea Butter  
2 ½ tablespoons Cocoa Butter  
3 tablespoons Almond or Olive Oil  
10 drops flavor (more or less, depending on strength and flavor)



## UNFLAVORED LIP BALM

2 tablespoons Olive Oil (light and unflavored)  
1 tablespoon Wax Pellets, White or Yellow in color  
1 Vitamin E Capsule Contents  
½ teaspoon honey (adds sweetness and texture)  
10-12 drops Essential Oil, opt.

## CHOCOLATE LIP BALM

*This chocolate flavored lip balm is a hit with those who must have a daily fix. Be certain to use real bar chocolate not powdered cocoa. Be cautious about adding too much as this balm can easily become a candy if too much chocolate is added.*

2 tablespoons olive oil (light and unflavored)  
1 tablespoon wax pellets — white or yellow in color  
1 Vitamin E capsule contents  
1 tablespoon grated chocolate (even mint or orange flavored will work)  
10-12 drops essential oil to match the cocoa, mint or orange of the chocolate

**SWEETENERS:** Honey, corn syrup, or a commercial sugar oil can be used to give sweetness to any homemade lip balm.



## MISCELLANEOUS

### BASIC BUBBLE BATH

1 quart water  
1 bar unscented Castile Soap  
(grated or flaked)  
1 ½ oz Glycerin  
5 drops fragrance

Mix all ingredients together. Store in a bottle or other container. Add when running bath water.

\*\* Castile soap and glycerin may be found at any health food store.



### LILAC BUBBLE BATH

1 quart water  
1 bar unscented Castile Soap (grated or flaked)  
3 oz Glycerin  
5 drops Lilac Fragrance Oil  
½ teaspoon salt

Mix all ingredients together. Add a few drops of red and blue food color; mix well. Store in container. Pour a bit into running bath water.

#### ***Variations:***

\*Lavender Dreams Bubble Bath - add 3 drops of lavender essential oil.

\*Cherries Bubble Bath: Add 15 drops of cherry fragrance oil.

\*\*Use 1 cup unscented shampoo instead of Castile Soap in any of these recipes.

### BUBBLE BAGS

*Use these in the shower, when there is no time to take a soaking bath.*

2 parts oatmeal  
2 parts dried herbs  
1 part grated soap

Place ingredients in a cloth bag and use as a washcloth. If making larger quantities, store in tightly sealed jar. **To Use:** Place a handful in the center of washcloth and tie.

### LAP OF LUXURY LOTION BAR

1 oz wt. cosmetic grade beeswax  
.6 oz wt sal butter( substitute any butter)  
.7 oz wt. macadamia nut oil  
.3 oz wt. avocado oil  
4 grams favorite fragrance or essential oil.

Heat your solids (beeswax & butters)until they are liquid. Add in the rest of your ingredients and stir thoroughly. Pour lotion bar mixture into the containers or molds of your choice, then wait for them to solidify before using. Recipe yields approx. 2.5 oz wt

### LOTION BAR

1.5 oz wt Beeswax     1.5 oz wt Shea Butter  
1 oz wt Cocoa Butter   2 oz wt Sweet Almond Oil  
or White Cocoa Butter 1/4 tsp Vitamin E Acetate

Melt and mix well and pour into any container. I poured into some old tin jello molds and the bars are kinda cute. They popped right out of the molds.

### Moms-to-be FOOT SOAK

*Expectant mothers often experience discomfort in their feet, including swelling. Soaking feet in a soothing foot soak helps counteract the discomfort.*



1 ¼ cups Epsom salts  
1 ¼ cup Kosher salt  
¼ cup baking soda  
¼ cup cornstarch  
½ teaspoon (or less) Lemon  
Essential Oil  
¼ teaspoon (or less) Spearmint  
Essential Oil

Combine salts in a jar, add baking soda and cornstarch. Shake to blend. Add essential oils, put lid on jar and shake well until blended. Pour mixture into a paper bag or other open container. Use within a few weeks.

### BASIC BODY BUTTER



28 grams White Cocoa Butter  
28 grams Shea Butter  
24 grams Apricot Kernel Oil  
32 grams Macadamia Nut Oil  
14 grams Colorless Jojoba Oil  
14 grams Aloe Butter  
36 grams Beeswax  
Fragrance as desired

Weigh all ingredients (White Cocoa Butter to Beeswax) into a microwave safe container. Melt with short burst of time until all ingredients have reached a liquid state. Mix well, add scent continue to whip as the butter cools. Transfer into desired containers.

**Comments:** This butter is not too hard and not too soft. It melts nicely from the warmth of your hands. If looking for something a bit harder you can either increase the Beeswax or White Cocoa Butter by 4 grams. May also do half and half.

## WATER SOFTENING FIZZ

1 cup baking soda  
½ cup Citric acid  
½ cup cornstarch  
2 ½ tablespoons oil (can use grapeseed and almond combination)  
¾ tablespoon water  
2 teaspoons essential or fragrance oils  
½ teaspoon Borax  
Spray bottle filled with Witch hazel

Mix the baking soda, citric acid and corn starch until well blended. In a separate bowl combine cooking oil, water, essential oil, and borax; mix well. Drizzle wet ingredients into the dry ingredients, pouring with one hand and squishing it together with the other. Pack into candy or soap molds (circular 2 oz. soap mold with a flower pattern on the top works great). Pack in really hard, then immediately flip it over and tap it out onto a lined cookie sheet. Lightly mist with witch hazel and let dry overnight.

>>>>>>continued on next column>>>>>>

\*Next day, turn over and mist the bottoms with

witch hazel; let dry one more day. The witch hazel forms a crust on the outside that keeps them from cracking and falling apart (still a little fragile). Don't make them when it's damp outside, high humidity makes it much harder to do.

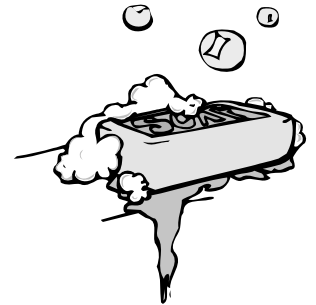
## MELT AND POUR SOAPS

### A. Basic Equipment:

- Double boiler or microwave for melting
- Melt slowly - do not get too hot
- 1 pound soap = approx.. 2 minutes on High in the microwave

### B. Basic Ingredients:

- Glycerin bricks - you can purchase them all ready for melting
- Essential oils, herbs, exfoliants, coloring—dyes or pigments.



*\*The soap may be poured into cake pans, bread pans, muffin tins, or commercial molds of all shapes and sizes.*

### RESOURCES:

Pine Meadows in Orem

[www.pinemeadows.net](http://www.pinemeadows.net)

Majestic Mountain Sage in Logan

[www.MMS.com](http://www.MMS.com)

The Scent Shack

[www.thescentshack.com](http://www.thescentshack.com)